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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,098	11/17/2003	Chris A. Calhoun	DP-310410	3246
22851	7590	06/03/2005	EXAMINER	
DELPHI TECHNOLOGIES, INC.			FLANIGAN, ALLEN J	
M/C 480-410-202			ART UNIT	
PO BOX 5052			PAPER NUMBER	
TROY, MI 48007			3753	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/715,098	Applicant(s) CALHOUN ET AL.	
	Examiner Allen J. Flanigan	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-17 and 22 is/are rejected.
- 7) ☒ Claim(s) 7-10 and 18-21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

The disclosure is objected to because of the following informalities: The phrase "slots 50 are used to connect the tank 10 to the cooling system" in lines 5-6 of page 6 is misleading and confusing. "Connect" implies a hydraulic connection, and it is clear that slots 50 are used to mount the heat exchanger by attaching the tank to some structural member (very likely not another component of the cooling system). The term used in the previous sentence, "mounting", is more appropriate.

Appropriate correction is required.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

See the objection above to the use of the term "connecting" regarding mounting slots 50.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Claims 1 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Krueger et al.

Krueger et al. show a manifold formed of a single sheet of material clad with brazing material on both sides. Edge 42 reads on the claimed "tab"

extending from the upper ("joint") wall 36 that sealingly engages the sidewall opposite flat wall 34. Note that this edge is enclosed within the chamber as recited in the claim. The recitation "extending through a rectangular cross-section" is met by Krueger et al. Rectangular is defined as "having edges, surfaces, or faces that meet at right angles", or simply "having right angles" (see Merriam Webster Online dictionary, or American Heritage Dictionary, Second College Edition, c. 1982 Houghton Mifflin)¹. Krueger et al. clearly shows at least two right angles between the flat surfaces of their illustrated header construction. The fact that the illustrative embodiment of the figures shows a *rectangular parallelogram with four flat sides joined by four right angles* does not necessitate that the examiner read such a limitation into the claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-6, 14-17, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger et al. in view of Getto and Shinmura et al.

¹ During prosecution, terms used in the claims must be "given *>their< broadest reasonable interpretation consistent with the specification." > In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).< Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Getto and Shinmura et al. show that it is known in one-piece header tubes formed of a brazing sheet as in Krueger et al. to provide a mounting bracket means (featuring enclosed holes as shown in Getto (Figs. 4, 5) or open-ended slots as shown in Shinmura et al.(Figs. 15, 16)) as an extension of the edge or edges of the sheet adjacent the seam. The advantages of such a construction are self evident, and Shinmura et al. indicate that "since bracket portions 112 are formed integrally, . . . separate members as bracket portions are not necessary" (lines 47-48 of column 9). Thus, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to form such brackets on the external edge of the lap seam of Krueger et al. to extend out as shown in Getto to provide a mounting means. Regarding claims 5 and 17, Shinmura et al. show the removal of material to limit the extension of the bracket laterally, as extending the flange beyond where mounting holes or slots are required would be superfluous and wasteful of material and weight.

Claims 7-10 and 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The remaining references of record show folded sheet heat exchanger manifolds and/or manifolds of rectangular parallelogram configuration.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen J. Flanigan whose telephone number is (571) 272-4910. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen J. Flanigan
Primary Examiner
Art Unit 3753

AJF